

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.**



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/030,222	04/01/2002	Norbert Kohler	612.41024X00	9212

20457 7590 01/23/2004

ANTONELLI, TERRY, STOUT & KRAUS, LLP
1300 NORTH SEVENTEENTH STREET
SUITE 1800
ARLINGTON, VA 22209-9889

EXAMINER

RHEE, JANE J

ART UNIT	PAPER NUMBER
----------	--------------

1772

12

DATE MAILED: 01/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application N .

10/030,222

Applicant(s)

KOHLER ET AL.

Examiner

Jane J Rhee

Art Unit

1772

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10/23/03.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) 1-11 and 21-23 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 and 21-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Rejections Withdrawn

1. The 35 U.S.C. 112 rejection of claims 1-6 made of record in paragraph 2 of Paper 9 have been withdrawn due to applicant's amendment in Paper 11.

Rejections Repeated

2. The 35 U.S.C. 112 rejection of claim 4 made of record in paragraph 3 of Paper 9 have been repeated for the reasons previously of record in Paper 9.

New Rejections

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-2,5-8,10-11,21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heckel et al. in view of Biby et al. (6184261).

Heckel et al. discloses a pipe jacket comprising a volume defined by the space contained between a first enclosure interior to a second enclosure is filled with foam particles (figure 1 number 1). Heckel et al. discloses that the volume is an annular spaced defined by the outside of a pipe placed in another pipe (figure 1 number 1). Heckel et al. fail to disclose that between a first enclosure and a second enclosure the space is filled with vegetable foam particles. Heckel et al. fail to disclose that the fluid is

Art Unit: 1772

about 1N soda and that the average particle size is below 5mm. Heckel et al. fail to disclose that the vegetable foam comprises at least flour, plasticizer, another additive, a water content below 10% and preferable below 5%. Heckel et al. fail to disclose that the space further comprises at least one of the following insulants, silicate foam particles, aerogel foam particles, or dry powders.

Biby et al. teaches that the vegetable foam comprises at least flour (col. 4 line 47), plasticizer (col. 4 line 48), another additive (col. 4 line 49), a water content below 10% preferably below 5% (col. 4 line 50), and silicate particles (col. 6 line 53) for the purpose of being able to be disposed in a wastewater treatment system having facilities for biological or other types of degradative treatment (col. 2 lines 50-55). Biby et al. teaches that the average particle size is below 5mm (col. 5 lines 8-9) for the purpose of giving the foam structure and for being inexpensive and readily available (col. 5 lines 12-14).

Therefore, it would have been obvious to one having ordinary skill in the art at the time applicant's invention was made to provide Heckel et al. with that the vegetable foam comprises at least flour, plasticizer, another additive, a water content below 10% and preferable below 5%, and silicate particles in order to be disposed in a wastewater treatment system having facilities for biological or other types of degradative treatment (col. 2 lines 50-55) as taught by Biby et al.

Also, it would have been obvious to one having ordinary skill in the art at the time applicant's invention was made to provide Heckel et al. with the average particle size

Art Unit: 1772

that is below 5mm in order to giving the foam structure and for being inexpensive and readily available (col. 5 lines 12-14) as taught by Biby et al.

4. Claims 1,3-4,9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heckel et al. in view of Boehmer et al. (5272181).

Heckel discloses the thermal insulation described above. Heckel et al. fail to disclose that the vegetable foam is solubilized by an aqueous fluid. Heckel et al. fail to disclose that the vegetable foam have the following properties, thermal conductivity ranging between 0.03 and 0.06W/mK and at least partial solubility in an aqueous fluid.

Boehmer et al. teaches expanded vegetable foam material is solubilized by an aqueous fluid (col. 1 lines 49) for the purpose of being able to be placed on the subsurface layer of a landfill or to be disposed in a wastewater treatment system having facilities for biological or other types of degradative treatment (col. 2 lines 50-55).

Therefore, it would have been obvious to one having ordinary skill in the art at the time applicant's invention was made to provide Heckel et al. with expanded vegetable foam material that is solubilized by an aqueous fluid in order to be able to be placed on the subsurface layer of a landfill or to be disposed in a wastewater treatment system having facilities for biological or other types of degradative treatment (col. 2 lines 50-55) as taught by Boehmer et al.

Boehmer et al. discloses that vegetable foam comprises at least flour (col. 3 lines 50-52), plasticizer (col. 4 line 14), another additive (col. 3 lines 13-15), a water content below 10% (col. 8 line 15) as desired by the applicant, therefore, it would have been obvious to one having ordinary skill in the art at the time applicant's invention was made

Art Unit: 1772

to provide that the aqueous fluid that the vegetable foam is solubized by is about 1N soda and that the vegetable foam have a thermal conductivity ranging between 0.03 and 0.06W/mK, since it has been held that discovering optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d.

5. Claims 7, 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heckel et al. in view of Boehmer et al. (5272181) and in further view of applicant's admitted prior art (specification page 2).

Heckel et al. discloses a pipe jacket comprising a volume defined by the space contained between a first enclosure interior to a second enclosure is filled with foam particles (figure 1 number 1). Boehmer et al. teaches vegetable foam material (col. 3 – col. 4) for the purpose of being able to be disposed in a wastewater treatment system having facilities for biological or other types of degradative treatment (col. 2 lines 50-55).

Therefore, it would have been obvious to one having ordinary skill in the art at the time applicant's invention was made to provide Heckel et al. with vegetable foam material in order to be disposed in a wastewater treatment system having facilities for biological or other types of degradative treatment (col. 2 lines 50-55) as taught by Boehmer et al.

Heckel et al. and Boehmer et al. fail to disclose that the enclosure consist of a string of tubings. Applicant's admitted prior art teaches that it is common to have a whole string of production tubing during production of a well for servicing operations on downhole equipments or installations (page 2 of specification line 9-12).

Therefore, it would have been obvious to one having ordinary skill in the art at the time applicant's invention was made to provide Heckel et al. and Boehmer with string of production tubing during production of a well for servicing operations on downhole equipments or installations (page 2 of specification line 9-12) as taught by applicant's admitted prior art.

Response to Arguments

6. Applicant's arguments filed 10-23-03 have been fully considered but they are not persuasive.

In response to applicant's argument that "N soda" is not a relative term but an unambiguous definition, wherein "N" is well known as an abbreviation for normal solution, abbreviations are not permitted in the claim language and the claim is considered indefinite therefore, claim is still rejected under 35 U.S.C. 112 rejection.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Heckel et al. teaches a pipe insulating jacket wherein the insulating body consist of foam (col. 2 lines 28-29). Boehmer et al. teaches an expanded polymeric foam material which include plant based materials to enhance biodegradability such as starch (abstract). Starch is

Art Unit: 1772

well known in the art to provide utility for many purposes such as sound absorption and thermal insulation as taught by Grafe, Jurgen in the European Patent Application EP-A 0087847. Therefore, the motivation to combine Heckel et al. and Boehmer et al. is to provide a foam material with heat insulation capabilities.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

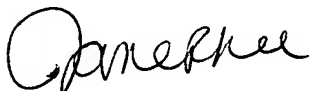
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jane J Rhee whose telephone number is 571-272-1499. The examiner can normally be reached on M-F.

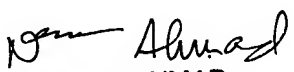
Art Unit: 1772

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nasser Ahmad can be reached on 571-272-1487. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and ~~703-872-9344 for After-Final communications.~~

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



Jane Rhee
January 12, 2004


NASSER AHMAD
PRIMARY EXAMINER